United States Patent [19]

Carson

[11] **Patent Number: 4,493,286**

[45] **Date of Patent: Jan. 15, 1985**

[54] **METHOD AND APPARATUS FOR APPLYING A MULTI-COMPONENT ADHESIVE**

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[21] Appl. No.: **516,679**

[22] Filed: **Jul. 25, 1983**

[51] **Int. Cl.**[3] **B05D 1/02;** B05B 7/12; B05B 7/26

[52] **U.S. Cl.** **118/677;** 222/135; 427/426; 118/679; 118/683; 118/688; 118/676

[58] **Field of Search** 222/135; 118/676, 677, 118/683, 688, 679; 427/426

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[57] **ABSTRACT**

An apparatus and method for applying a multi-component liquid adhesive. A liquid resin reservoir and a liquid hardener reservoir are connected by separate conduit means to resin and hardener mix chamber which is positioned adjacent to a dispenser so that the adhesive can be spread at substantially the same time as it is mixed. Separate resin and hardener pumps are each driven by their own variable output capacity power sources and means are provided for sensing the instantaneous speed of these pumps. These sensors are connected to separate control means for the power sources so that the power output to both of the pumps will be proportional to their respective instantaneous speeds. This apparatus compensates for temperature induced changes in viscosity of the resin or hardener so as to allow mixing proportions to remain constant. Also disclosed is a means for increasing or decreasing the total amount of adhesive produced without having to reset the resin and hardener mix and a means for forcing water or air into the mix chamber in the event of an unanticipated stoppage of the system so as to prevent hardening of the mixture in the mix chamber and dispenser.

19 Claims, 3 Drawing Figures